



Site Navigation

- Cleanups, Remediation
- Emergency Response
- Licensing
- Permits, Registrations
- Preventing Pollution
- Recycling
- Reporting
- Rules

- Data
- Forms
- Maps
- Public Notices
- Publications
- Records
- Webcasts

- About Us
- Contact Us

How 's our Customer Service? Please fill out our [Customer Satisfaction Survey](#)

You are here: [Home](#) → [Publications](#) → [Periodicals](#) → [Natural Outlook](#) → [Fall 2003](#) → The Health of Texas Waters

» Questions or Comments: ac@tceq.texas.gov

The Health of Texas Waters

The merger of two reports required by the federal Clean Water Act means more information is available on the condition of lakes, rivers, and estuaries in Texas.

Revamped report provides more information on water quality

In this story:

[New Classifications](#)

[More Data Available](#)

[Sidebar: Indicators of Problems](#)

The TCEQ's biennial report on the condition of Texas water bodies is being presented in a more comprehensive manner. The report, which is available online, also includes an easy way for Texans to check the water quality status of more than 700 lakes, rivers, and streams.

The *2002 Draft Texas Water Quality Inventory and 303(d) List* combines two separate reports required under the federal Clean Water Act: the 305(b) water quality inventory and the 303(d) list of waters that do not meet the state's surface water quality standards due to contamination or other problems.

The new format also assigns all bodies of water to one of five categories based on levels of water quality. These rankings show how close waters come to meeting their "designated uses," such as swimming; a source for drinking water (human use), fishing and oyster harvesting; and a healthy environment for fish and other aquatic species.

The consolidated report lists the status of streams, reservoirs, estuaries, and near-shore waters in the Gulf of Mexico, as well as the agency's plans for dealing with existing water quality problems. Impaired water bodies are usually assigned to the Total Maximum Daily Load (TMDL) Program to determine the sources and causes of pollution and to develop cleanup plans.

[Back to the top](#)

New Classifications

The revamped report was prompted by the Environmental Protection Agency, which recommended that states use the new format to better characterize the status of waterways and more clearly explain cleanup strategies. Starting with the 2002 report, which awaits final approval from EPA, the TCEQ uses the following classifications to grade water bodies:

Category 1: Attaining the state water quality standards.

Category 2: Attaining some designated uses; insufficient information is available to determine whether the remaining uses are attained.

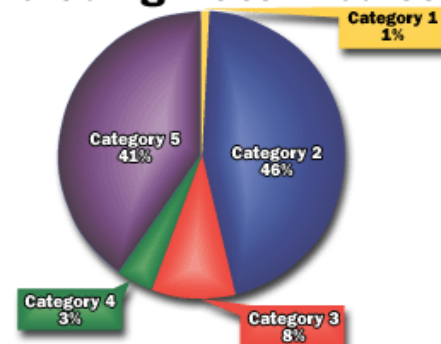
Category 3: Lacking sufficient data to determine whether any designated uses are attained (many small water bodies do not have water year-round and are not monitored regularly).

Category 4: Failing to meet one or more designated uses; a TMDL is not required or has been completed.

Category 5: Failing to attain water quality standards; a TMDL or some other action is required.

Of the 731 water bodies assessed in Texas in 2002, the 298 water bodies listed in Category 5 receive the most attention from the TCEQ. They are assigned to one of three subcategories (A, B, and C), depending on how the TCEQ intends to address individual water quality problems. For waters in Category 5A, TMDLs will begin in the next several years. Before TMDLs are scheduled for Category 5B waters, the water quality standards will be reviewed to determine whether uses and criteria are appropriate and accurate. Category 5C waters require additional

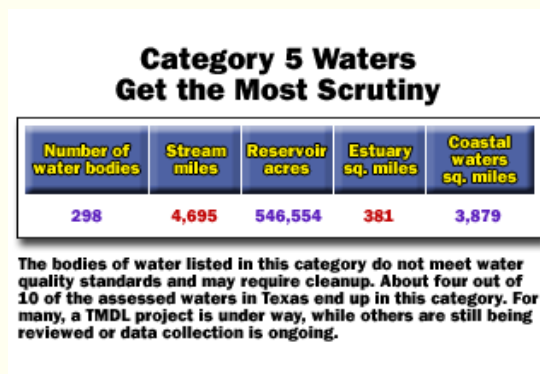
Grading Water Bodies



The majority of assessed water bodies in Texas fall into either Category 2 (attaining some water quality standards) or Category 5 (not meeting water quality standards).

monitoring to better characterize the water quality conditions. This information will determine whether the water quality standard should be reviewed or a TMDL should be scheduled.

Restoring the quality of water bodies to meet their designated uses is a long-term project, taking five years or more. A TMDL is prepared for each pollutant in an impaired water body and submitted to EPA for approval. The TMDL identifies the amount of pollutant a water body can safely handle. Then, the TCEQ develops an implementation plan detailing the necessary cleanup activities.



Implementation plans often address nonpoint source pollution, which can be traced to causes such as fertilizer, pesticides, leaking oil from cars and trucks, and construction debris. This pollution is often carried into creeks and streams by runoff.

Patrick Roques of the TCEQ says the number of water bodies assigned to Category 5 demonstrates that "Texas has significant challenges in addressing nonpoint sources, as well as some localized contamination issues that will require lengthy recovery. Some are persistent, long-term contamination problems."

The TCEQ works with a number of partners to keep tabs on water quality around the state. The Texas Clean Rivers Program and federal, state, regional, and local agencies collect and share relevant data.

Addressing water quality in a state this size can be a daunting task, admits Roques, who heads up the agency's Surface Water Quality Monitoring Program. "It's a challenge, but we feel we're monitoring water bodies with the highest human use and representing the most important resources for drinking water, recreation, and aquatic life," he said.

[Back to the top](#)

More Data Available

Roques said the task of reworking the 305(b) and 303(d) lists into a consolidated report has benefited the agency.

"Merging the two has helped our water programs focus on the most important water quality problems across the state and identify effective means of restoring water quality," he said. "The process of developing these categories has generated additional information about management plans for both agency programs and the public. We're providing more information than we reported in the past."

Now TCEQ staffers are preparing the 2004 integrated report. The draft will be submitted to the commissioners early next spring and to EPA by April.

Meanwhile, the 2002 report is maintained online. Users can find individual water body assessments in the alphabetical listings or group assessments by river basin. Summary information about each water body includes assessment results, a list of water quality monitoring stations, and any relevant TCEQ reports.

Indicators of Problems

The TCEQ conducts regular monitoring and assessments of surface waters to determine which water bodies meet the standards for their designated uses—contact recreation, drinking water, general water uses, and/or support of aquatic life. The most common impairments found during water sampling are as follows:

Bacteria levels: Elevated concentrations of fecal coliform, E. coli, and enterococci are signs that waste may have reached the waters from inadequately treated sewage, improperly managed farming operations, failing septic systems, or pets in urban areas.

Dissolved oxygen: Aquatic life requires oxygen concentrations at a certain level to survive and thrive. The inability to support diverse, abundant aquatic life is an indication of poor water quality.

Dissolved solids: High levels of dissolved solids, such as chloride and sulfate, can cause water to be unusable—or simply too costly to treat—as a source for drinking water.

Metals: High concentrations of metals such as cadmium, mercury, and lead threaten drinking water supplies and human health. Evidence of metals often shows up in fish tissue or in bottom sediments. Metals also can affect livestock and aquatic life.

Organics: Toxic substances from pesticides and industrial chemicals pose the same concerns as metals. DDT, for example, was banned in the 1970s, but remains in the environment.

[Back to the top](#)

[Site Help](#) | [Disclaimer](#) | [Web Policies](#) | [Accessibility](#) | [Helping our Customers](#) | [TCEQ Homeland Security](#) | [Contact Us](#)



Last Modified Thu, 21 Jul 2011
©2002–2011 Texas Commission on Environmental Quality